FIG. 1

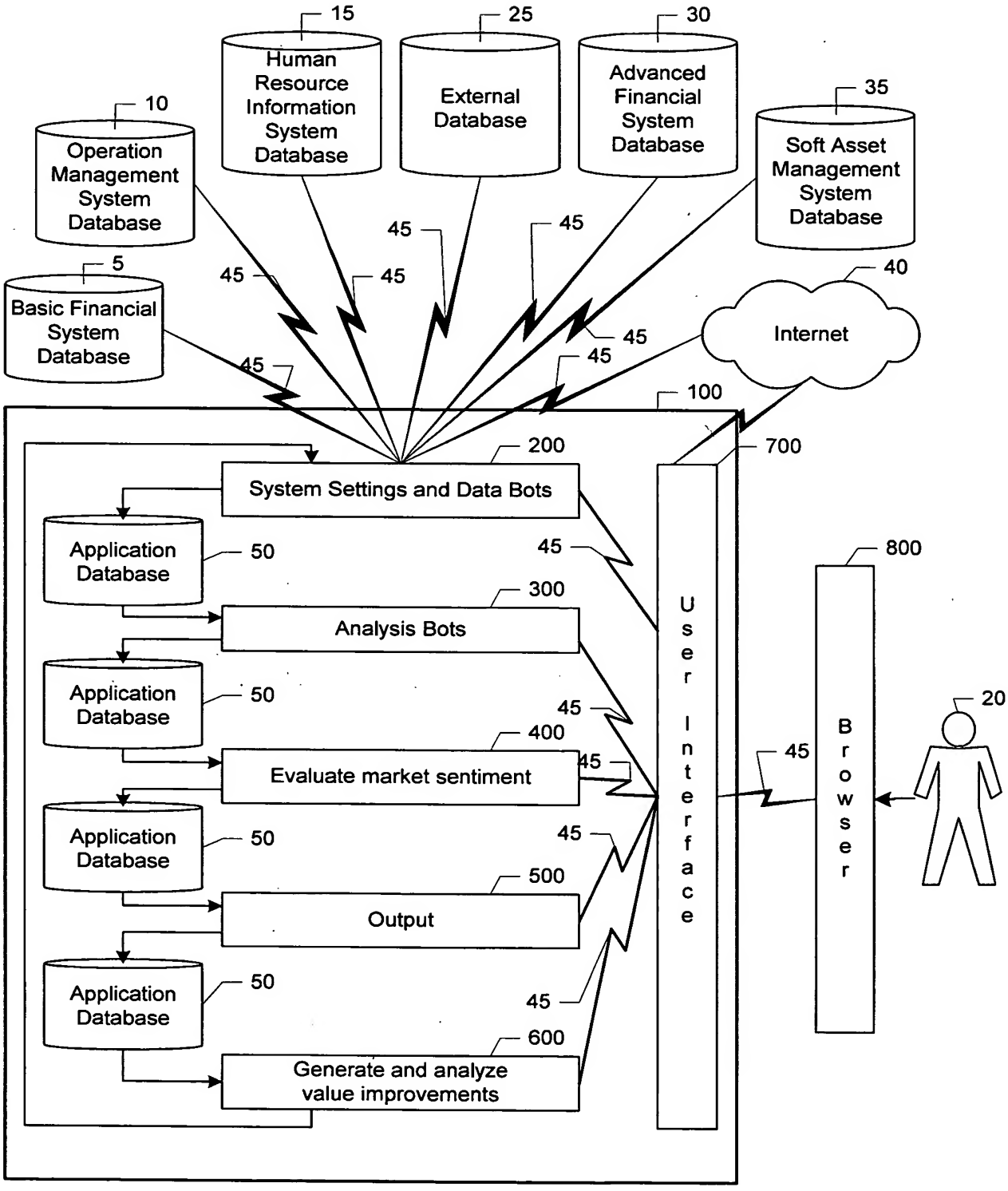

15
Human Resource Information System Database
25
External Database
30
Advanced Financial System Database
35
Soft Asset Management System Database
10
Operation Management System Database
5
Basic Financial System Database
40
Internet
45
100
200
System Settings and Data Bots
700
Application Database
50
300
Analysis Bots
400
Evaluate market sentiment
500
Output
600
Generate and analyze value improvements
User Interface
800
Browser
20

FIG. 2

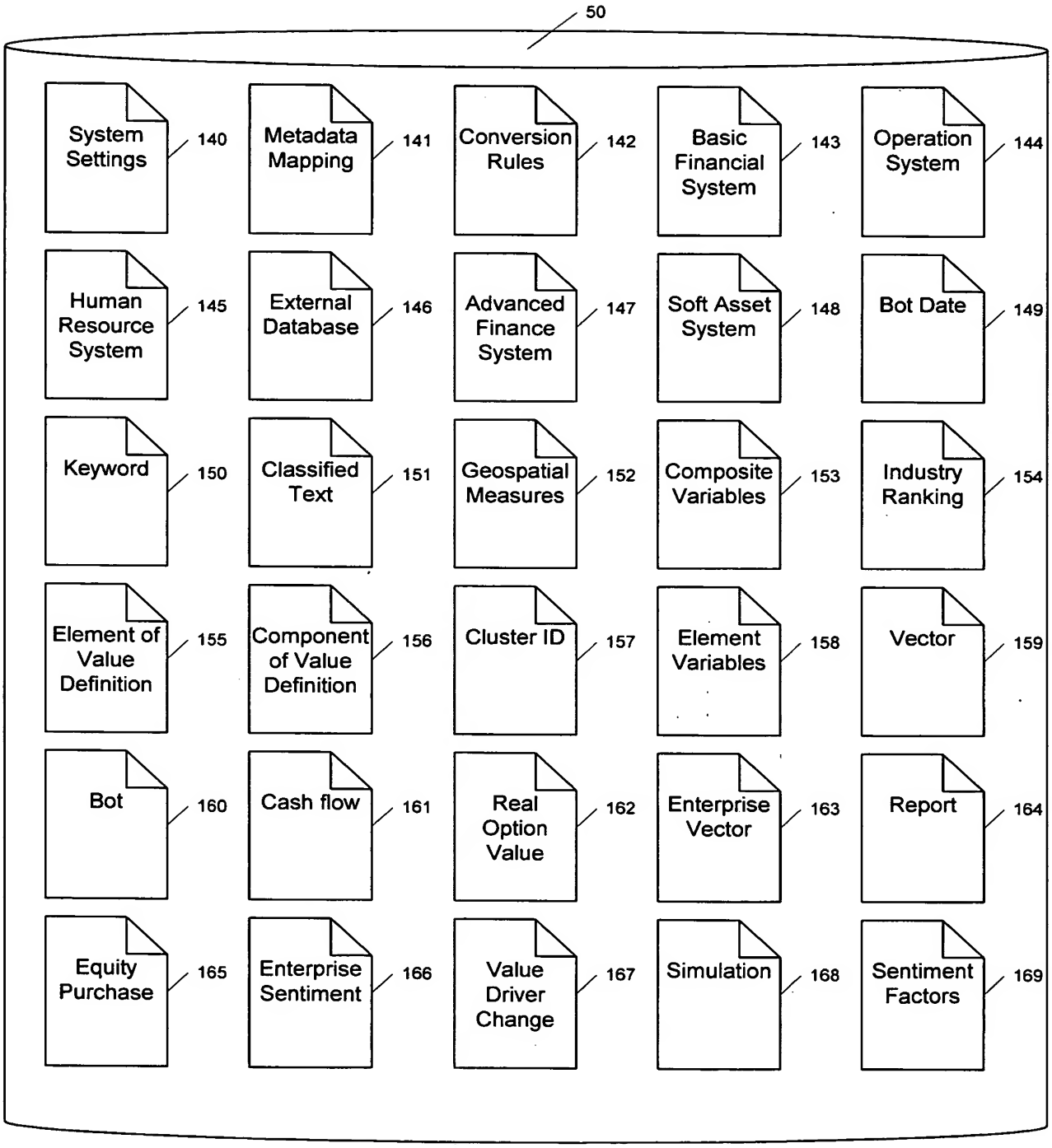

50
System Settings
140
Metadata Mapping
141
Conversion Rules
142
Basic Financial System
143
Operation System
144
Human Resource System
145
External Database
146
Advanced Finance System
147
Soft Asset System
148
Bot Date
149
Keyword
150
Classified Text
151
Geospatial Measures
152
Composite Variables
153
Industry Ranking
154
Element of Value Definition
155
Component of Value Definition
156
Cluster ID
157
Element Variables
158
Vector
159
Bot
160
Cash flow
161
Real Option Value
162
Enterprise Vector
163
Report
164
Equity Purchase
165
Enterprise Sentiment
166
Value Driver Change
167
Simulation
168
Sentiment Factors
169

FIG. 3

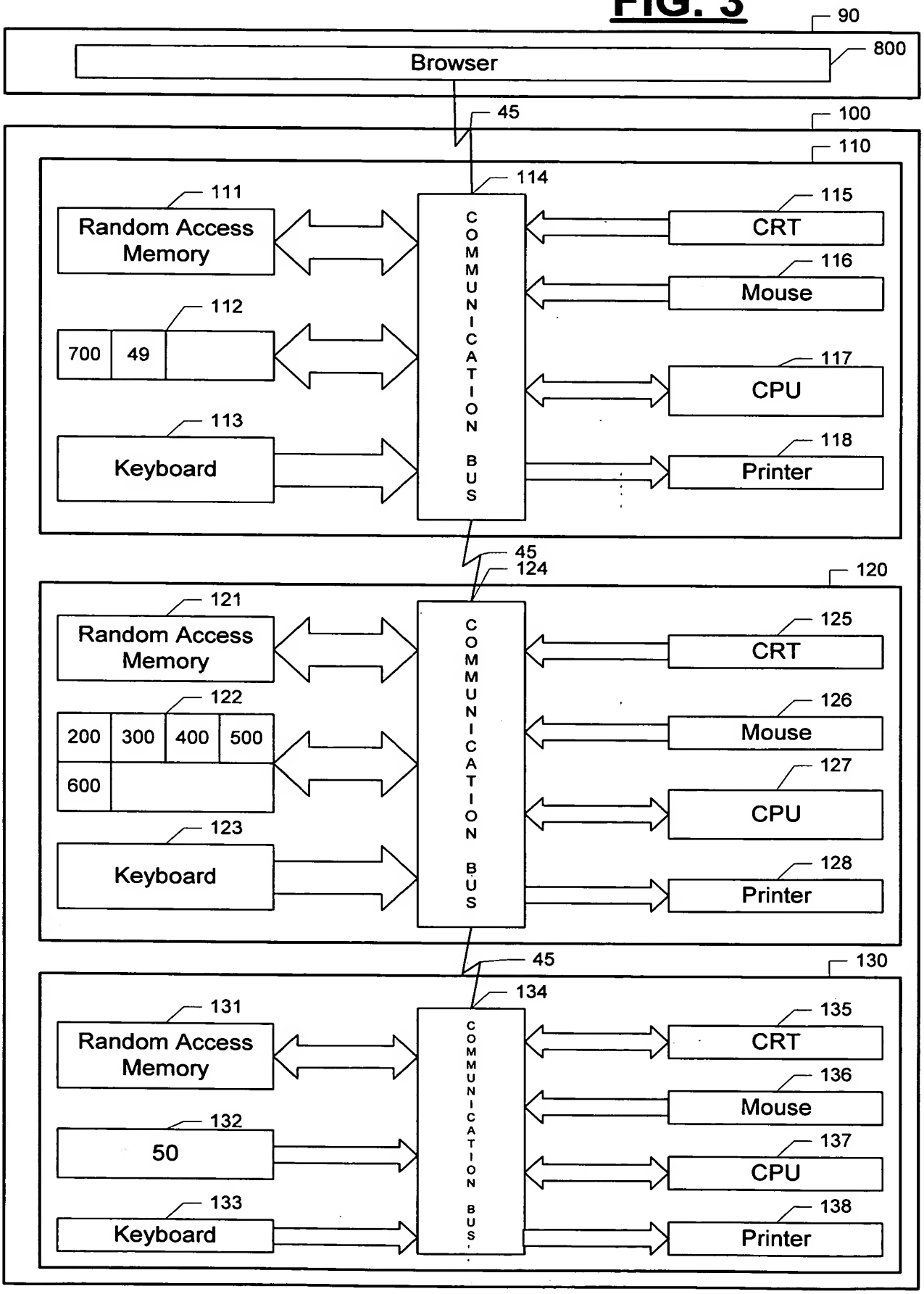
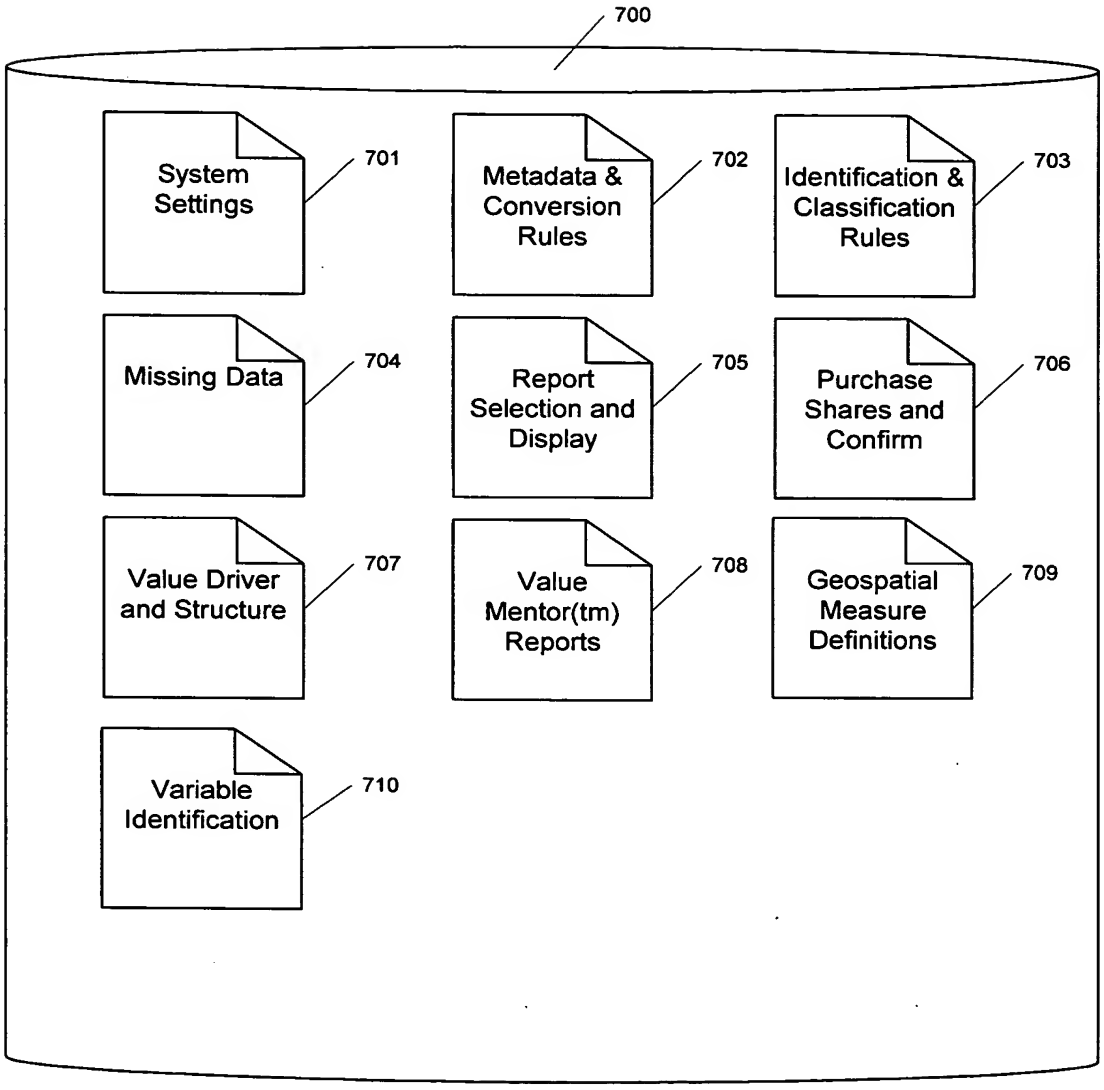

90
Browser
800
45
100
110
111
Random Access Memory
112
700
49
113
Keyboard
114
COMMUNICATION BUS
115
CRT
116
Mouse
117
CPU
118
Printer
45
124
120
121
Random Access Memory
122
200
300
400
500
600
123
Keyboard
125
CRT
126
Mouse
127
CPU
128
Printer
45
130
131
Random Access Memory
132
50
133
Keyboard
134
COMMUNICATION BUS
135
CRT
136
Mouse
137
CPU
138
Printer

FIG. 4


700
System Settings
701
Metadata & Conversion Rules
702
Identification & Classification Rules
703
Missing Data
704
Report Selection and Display
705
Purchase Shares and Confirm
706
Value Driver and Structure
707
Value Mentor(tm) Reports
708
Geospatial Measure Definitions
709
Variable Identification
710

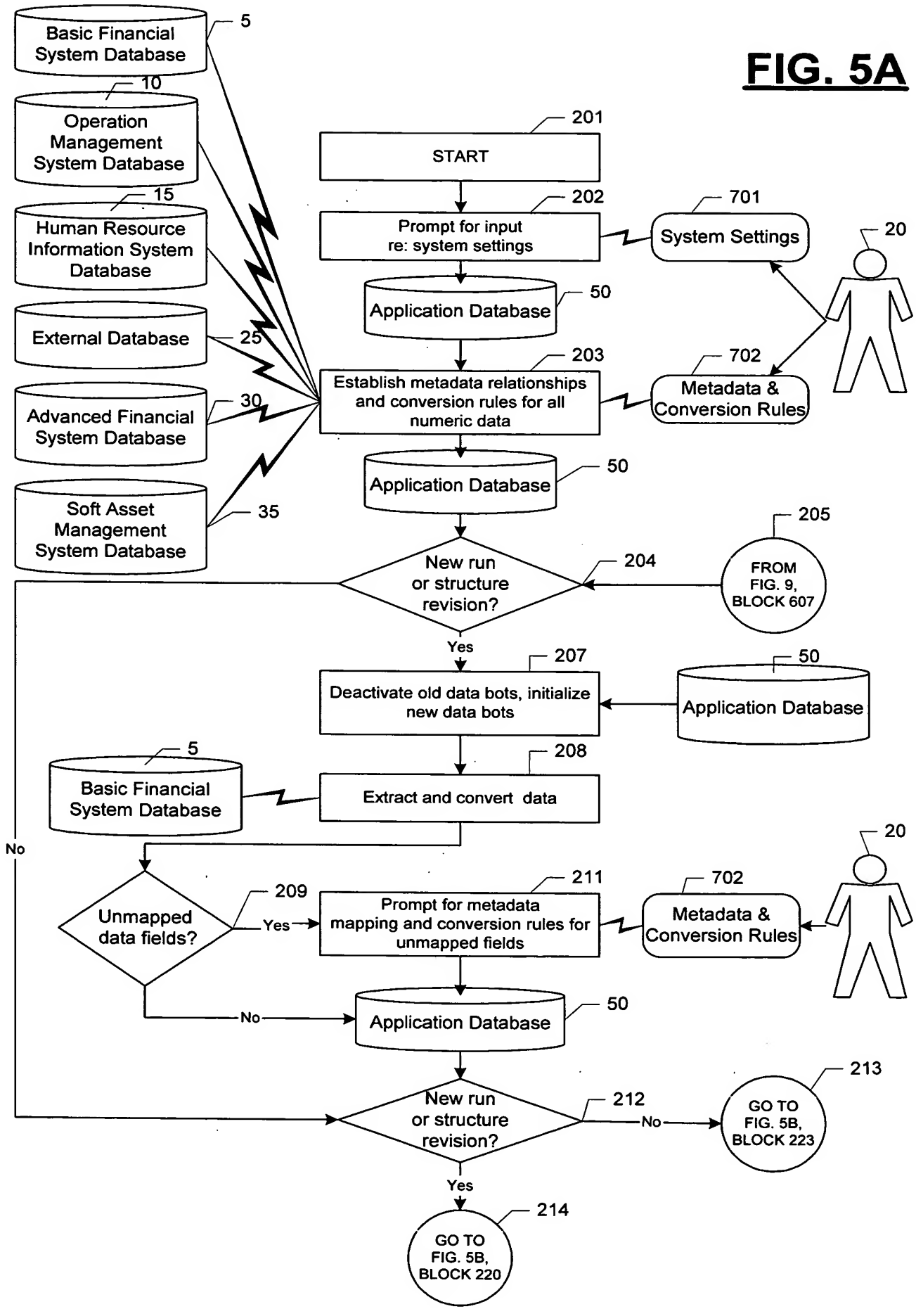


FIG. 5A
Basic Financial System Database
5
Operation Management System Database
10
Human Resource Information System Database
15
External Database
25
Advanced Financial System Database
30
Soft Asset Management System Database
35
201
START
202
Prompt for input re: system settings
701
System Settings
20
Application Database
50
203
Establish metadata relationships and conversion rules for all numeric data
702
Metadata & Conversion Rules
Application Database
50
205
FROM FIG. 9, BLOCK 607
204
New run or structure revision?
Yes
207
Deactivate old data bots, initialize new data bots
50
Application Database
5
Basic Financial System Database
208
Extract and convert data
No
Unmapped data fields?
209
Yes
211
Prompt for metadata mapping and conversion rules for unmapped fields
702
Metadata & Conversion Rules
20
No
Application Database
50
New run or structure revision?
212
No
213
GO TO FIG. 5B, BLOCK 223
Yes
214
GO TO FIG. 5B, BLOCK 220

FIG. 5B

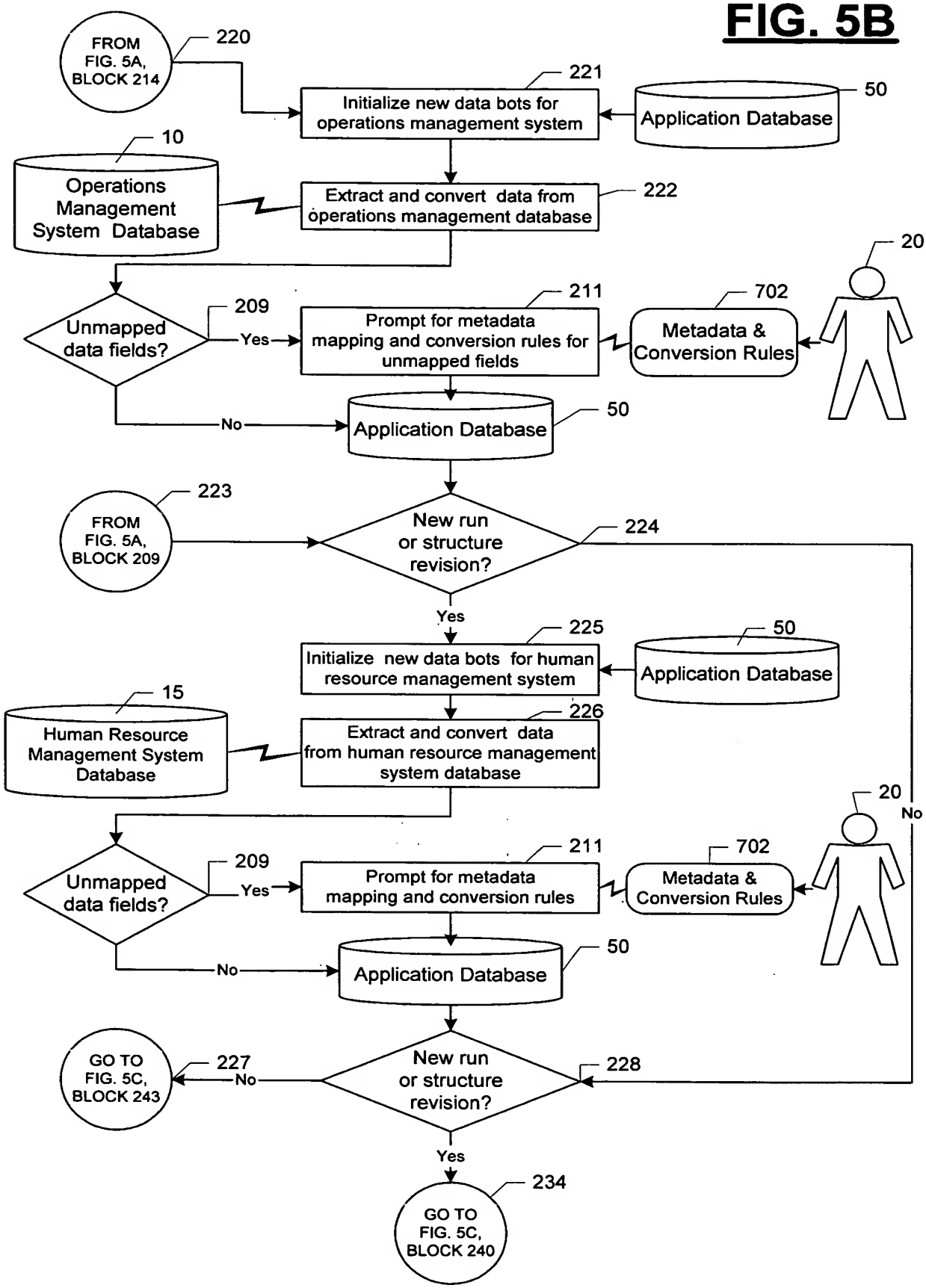

FROM FIG. 5A, BLOCK 214
220
221
Initialize new data bots for operations management system
Application Database
50
10
Operations Management System Database
Extract and convert data from operations management database
222
20
Unmapped data fields?
209
Yes
211
Prompt for metadata mapping and conversion rules for unmapped fields
702
Metadata & Conversion Rules
No
Application Database
50
FROM FIG. 5A, BLOCK 209
223
New run or structure revision?
224
Yes
225
Initialize new data bots for human resource management system
Application Database
50
15
Human Resource Management System Database
226
Extract and convert data from human resource management system database
20
No
Unmapped data fields?
209
Yes
211
Prompt for metadata mapping and conversion rules
702
Metadata & Conversion Rules
No
Application Database
50
GO TO FIG. 5C, BLOCK 243
227
No
New run or structure revision?
228
Yes
234
GO TO FIG. 5C, BLOCK 240

FIG. 5C

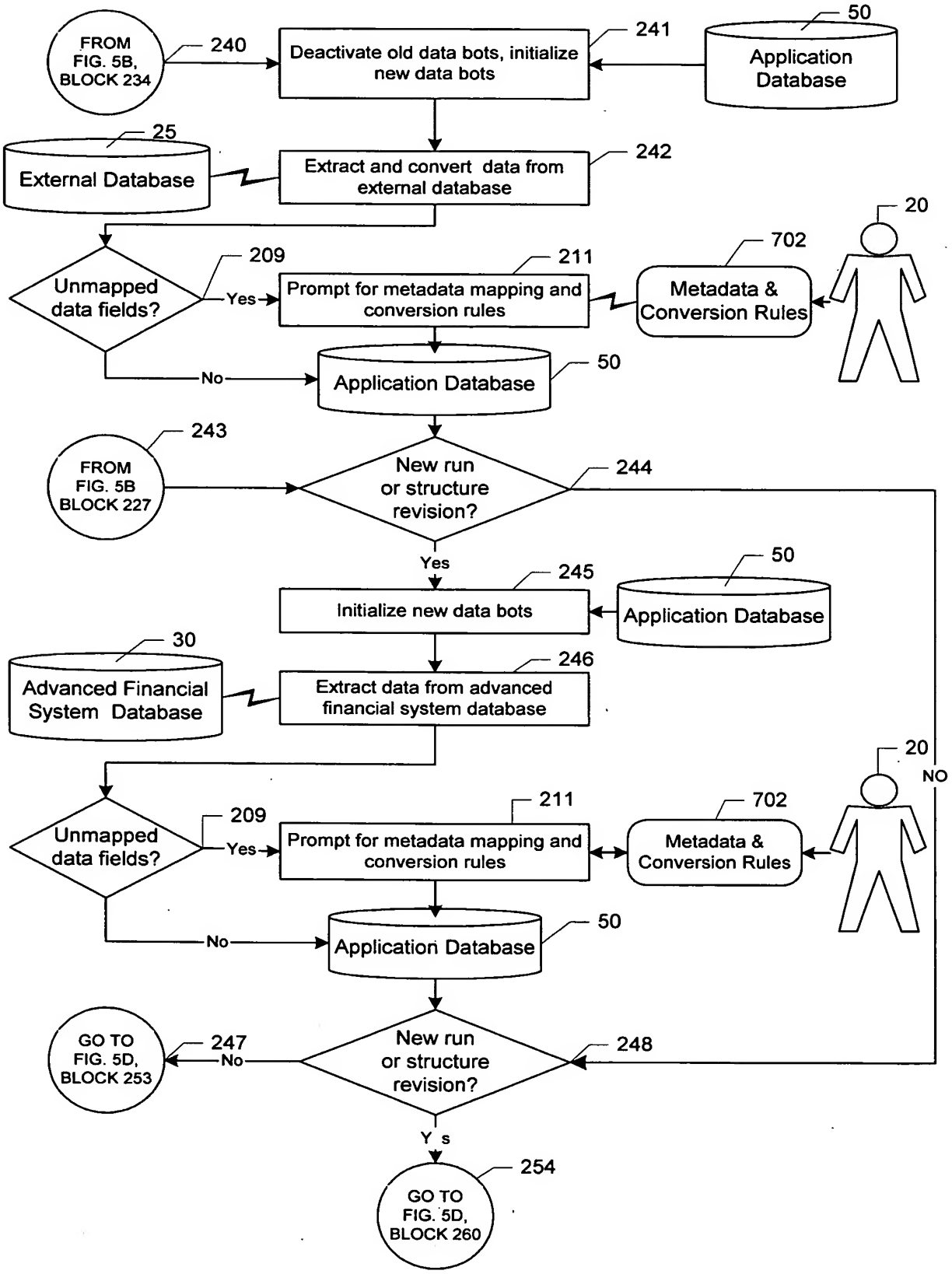

FROM FIG. 5B, BLOCK 234
240
Deactivate old data bots, initialize new data bots
241
50
Application Database
25
External Database
Extract and convert data from external database
242
20
702
Unmapped data fields?
209
Yes
211
Prompt for metadata mapping and conversion rules
Metadata & Conversion Rules
No
Application Database
50
243
FROM FIG. 5B BLOCK 227
New run or structure revision?
244
Yes
245
Initialize new data bots
50
Application Database
30
Advanced Financial System Database
246
Extract data from advanced financial system database
20
NO
Unmapped data fields?
209
Yes
211
Prompt for metadata mapping and conversion rules
702
Metadata & Conversion Rules
No
Application Database
50
GO TO FIG. 5D, BLOCK 253
247
No
New run or structure revision?
248
Y s
254
GO TO FIG. 5D, BLOCK 260

FIG. 5D

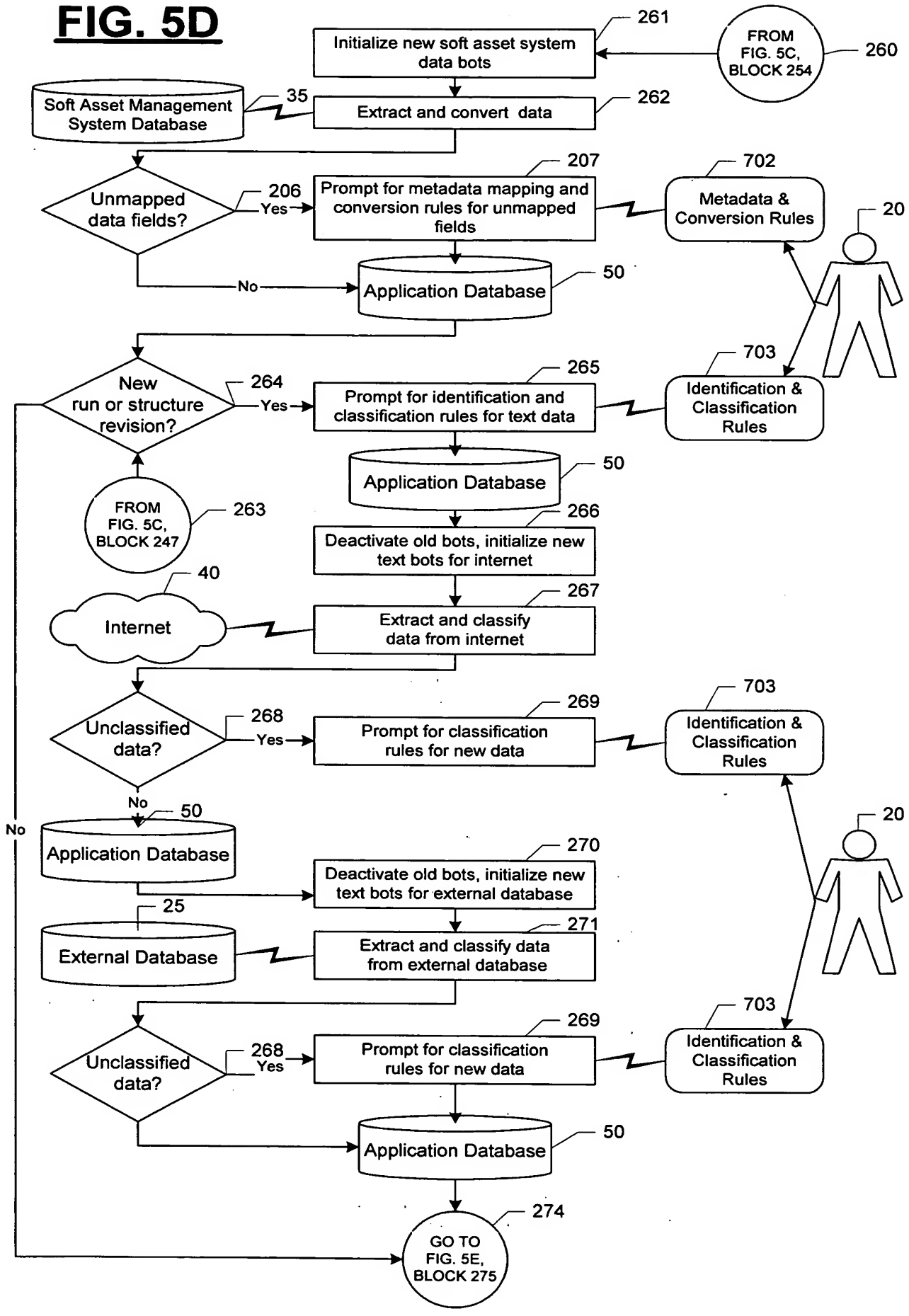

Initialize new soft asset system data bots
261
FROM FIG. 5C, BLOCK 254
260
Soft Asset Management System Database
35
Extract and convert data
262
Unmapped data fields?
206
Yes
Prompt for metadata mapping and conversion rules for unmapped fields
207
Metadata & Conversion Rules
702
20
No
Application Database
50
New run or structure revision?
264
Yes
Prompt for identification and classification rules for text data
265
Identification & Classification Rules
703
Application Database
50
FROM FIG. 5C, BLOCK 247
263
Deactivate old bots, initialize new text bots for internet
266
40
Internet
Extract and classify data from internet
267
Unclassified data?
268
Yes
Prompt for classification rules for new data
269
Identification & Classification Rules
703
No
50
Application Database
No
Deactivate old bots, initialize new text bots for external database
270
25
External Database
Extract and classify data from external database
271
Unclassified data?
268
Yes
Prompt for classification rules for new data
269
Identification & Classification Rules
703
Application Database
50
GO TO FIG. 5E, BLOCK 275
274

FIG. 5E

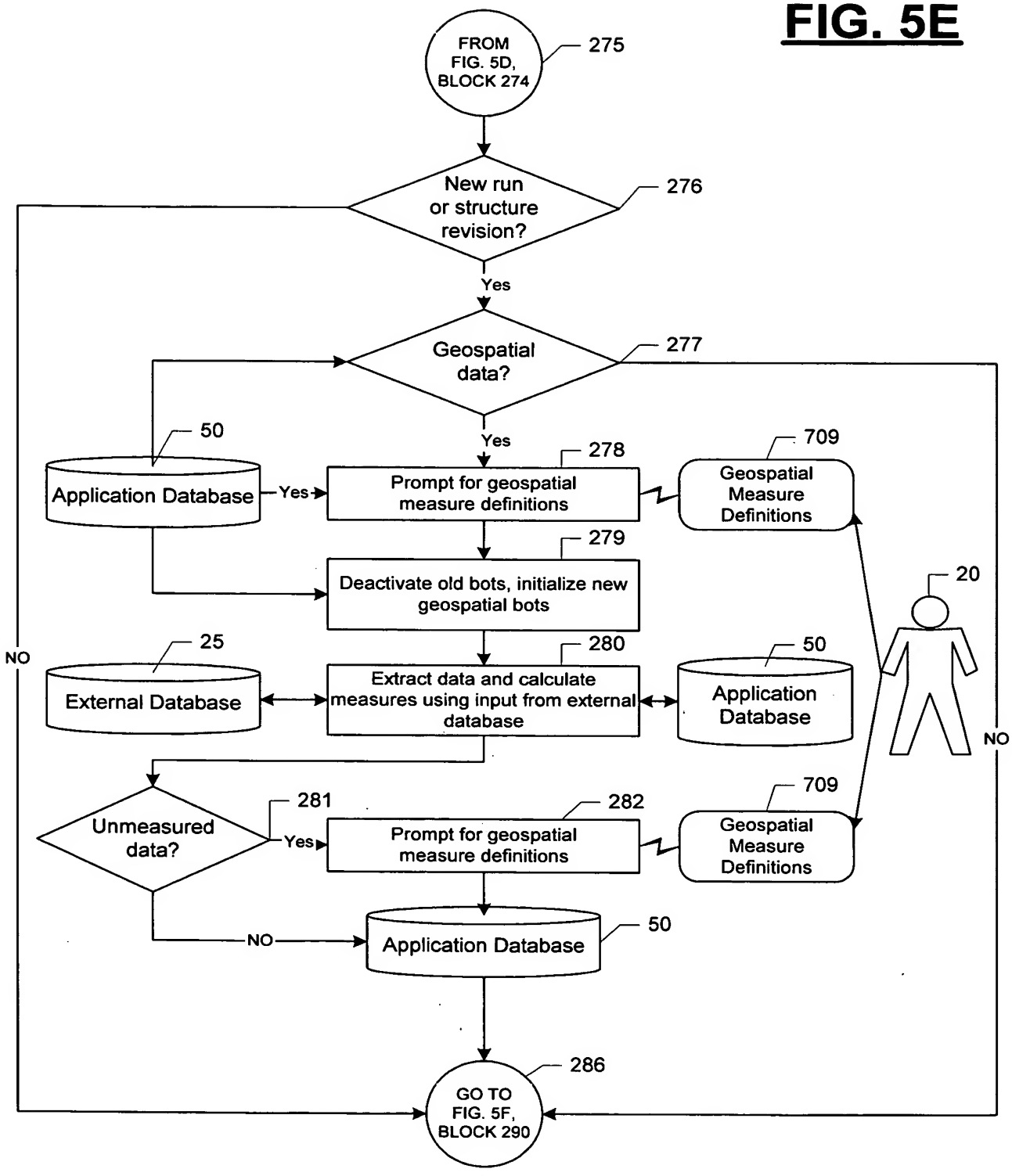

FROM FIG. 5D, BLOCK 274
275
New run or structure revision?
276
Yes
Geospatial data?
277
Yes
50
Application Database
Yes
278
Prompt for geospatial measure definitions
709
Geospatial Measure Definitions
279
Deactivate old bots, initialize new geospatial bots
20
NO
25
External Database
280
Extract data and calculate measures using input from external database
50
Application Database
NO
709
Unmeasured data?
281
Yes
282
Prompt for geospatial measure definitions
Geospatial Measure Definitions
NO
Application Database
50
286
GO TO FIG. 5F, BLOCK 290

FIG. 5F

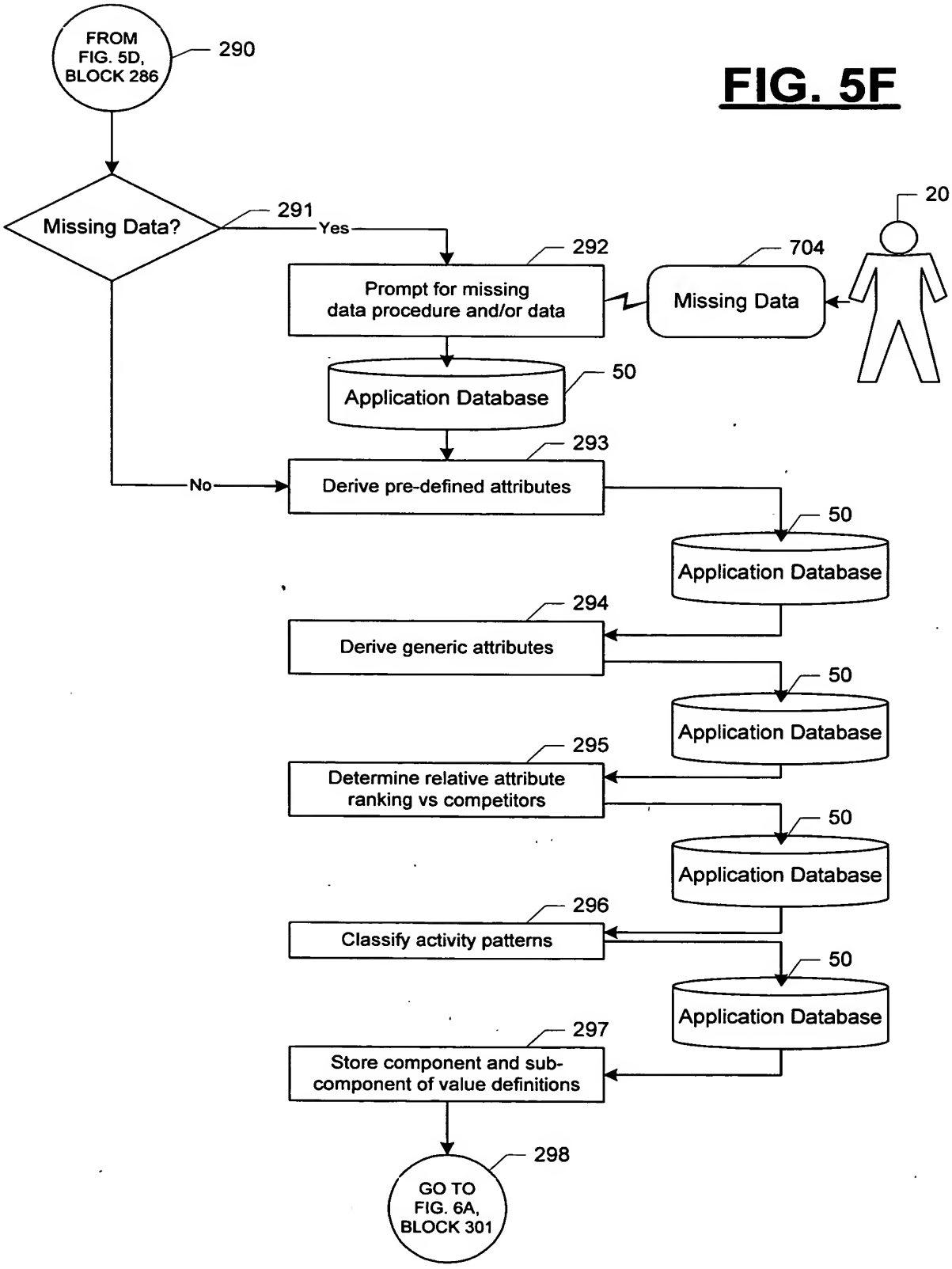

FROM FIG. 5D, BLOCK 286
290
Missing Data?
291
Yes
No
292
Prompt for missing data procedure and/or data
704
Missing Data
20
Application Database
50
293
Derive pre-defined attributes
Application Database
50
294
Derive generic attributes
Application Database
50
295
Determine relative attribute ranking vs competitors
Application Database
50
296
Classify activity patterns
Application Database
50
297
Store component and sub-component of value definitions
298
GO TO FIG. 6A, BLOCK 301

FIG. 6A

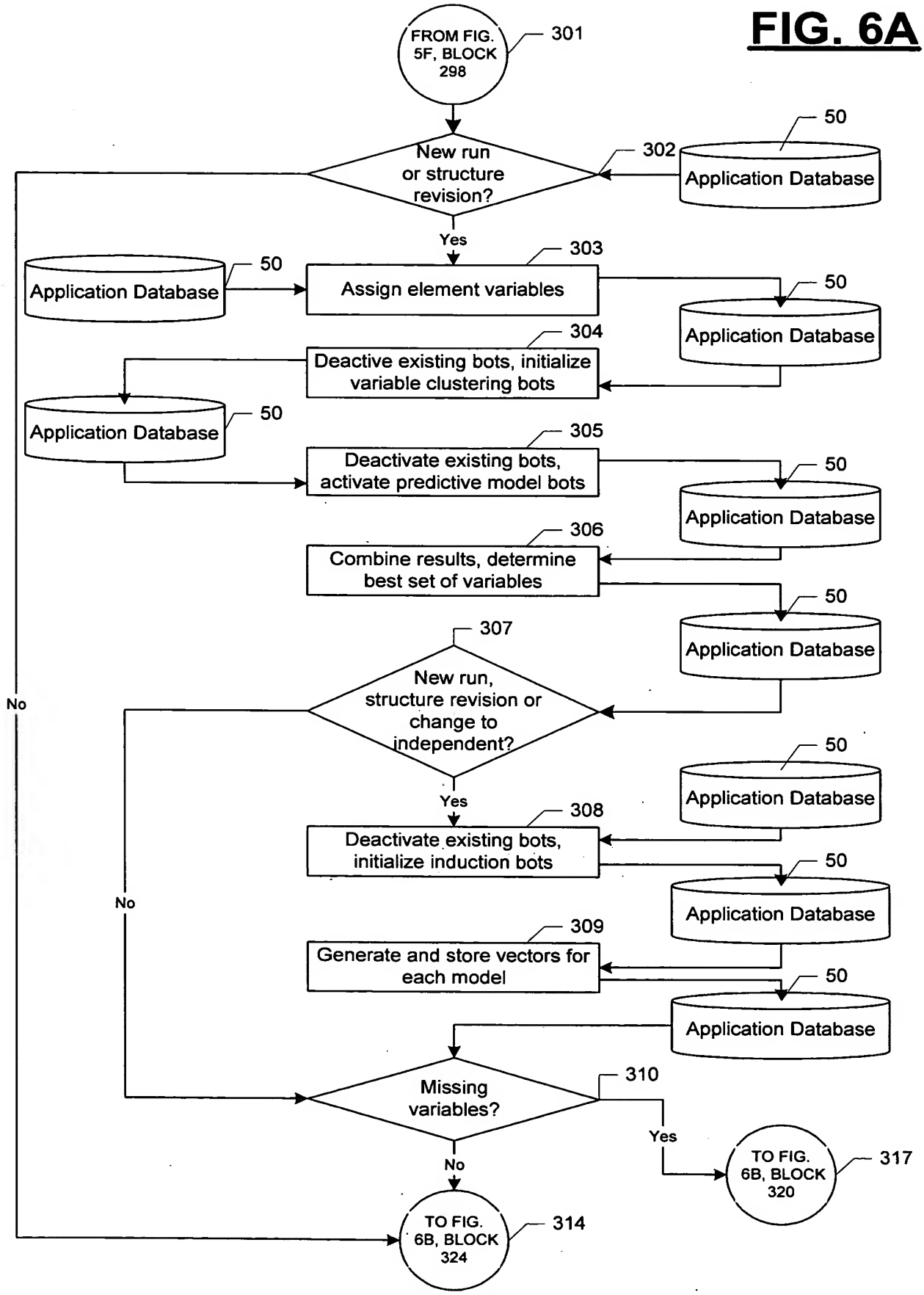

FROM FIG. 5F, BLOCK 298
301
New run or structure revision?
302
Application Database
50
Yes
Assign element variables
303
Deactive existing bots, initialize variable clustering bots
304
Deactivate existing bots, activate predictive model bots
305
Combine results, determine best set of variables
306
New run, structure revision or change to independent?
307
No
Yes
Deactivate existing bots, initialize induction bots
308
Generate and store vectors for each model
309
Missing variables?
310
Yes
No
TO FIG. 6B, BLOCK 320
317
TO FIG. 6B, BLOCK 324
314

FIG. 6B

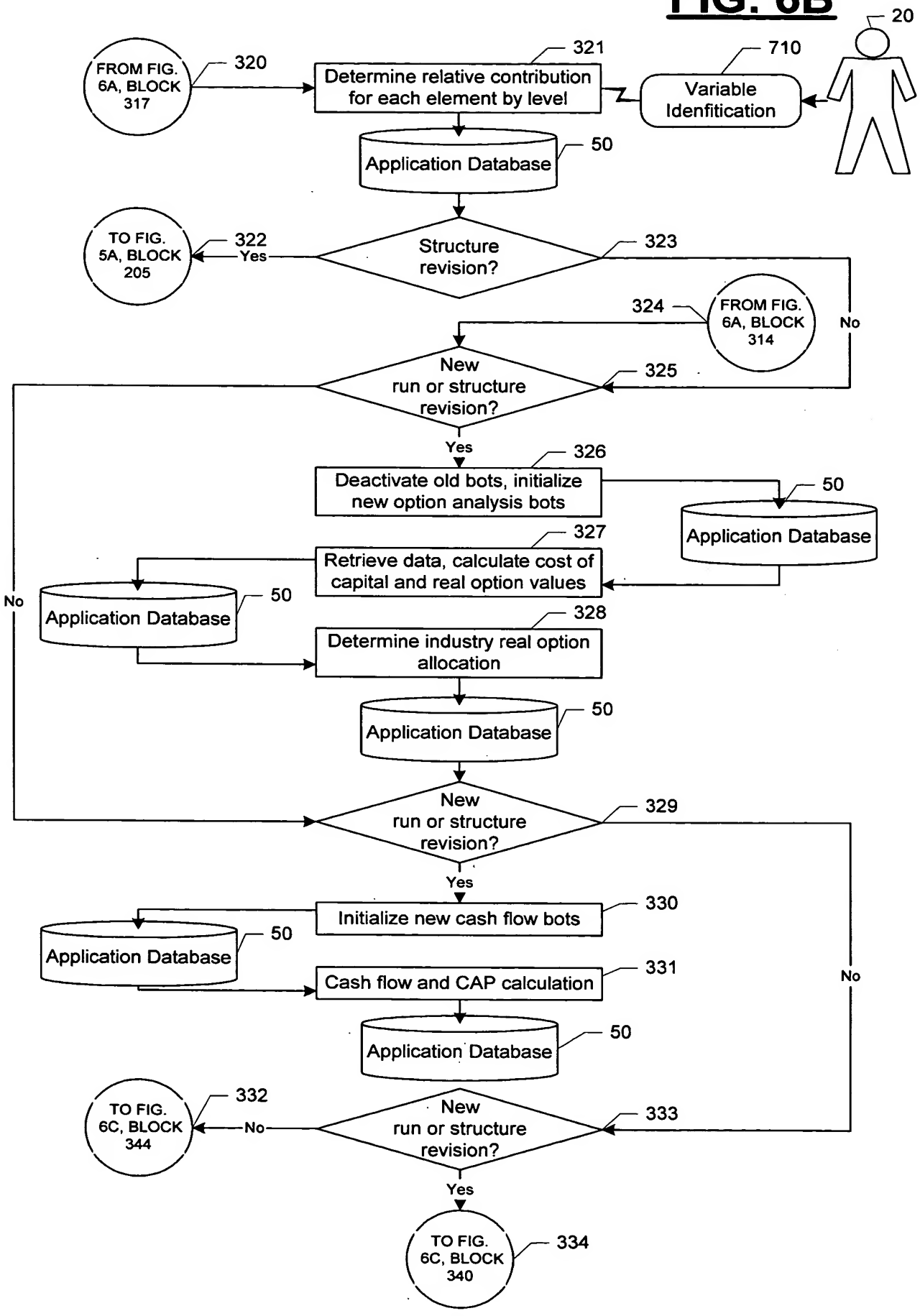

FROM FIG. 6A, BLOCK 317
320
321
Determine relative contribution for each element by level
710
Variable Idenfitication
20
Application Database
50
TO FIG. 5A, BLOCK 205
322
Yes
Structure revision?
323
324
FROM FIG. 6A, BLOCK 314
No
New run or structure revision?
325
Yes
326
Deactivate old bots, initialize new option analysis bots
50
Application Database
327
Retrieve data, calculate cost of capital and real option values
No
Application Database
50
328
Determine industry real option allocation
Application Database
50
New run or structure revision?
329
Yes
330
Initialize new cash flow bots
Application Database
50
331
Cash flow and CAP calculation
No
Application Database
50
TO FIG. 6C, BLOCK 344
332
No
New run or structure revision?
333
Yes
TO FIG. 6C, BLOCK 340
334

FIG. 6C

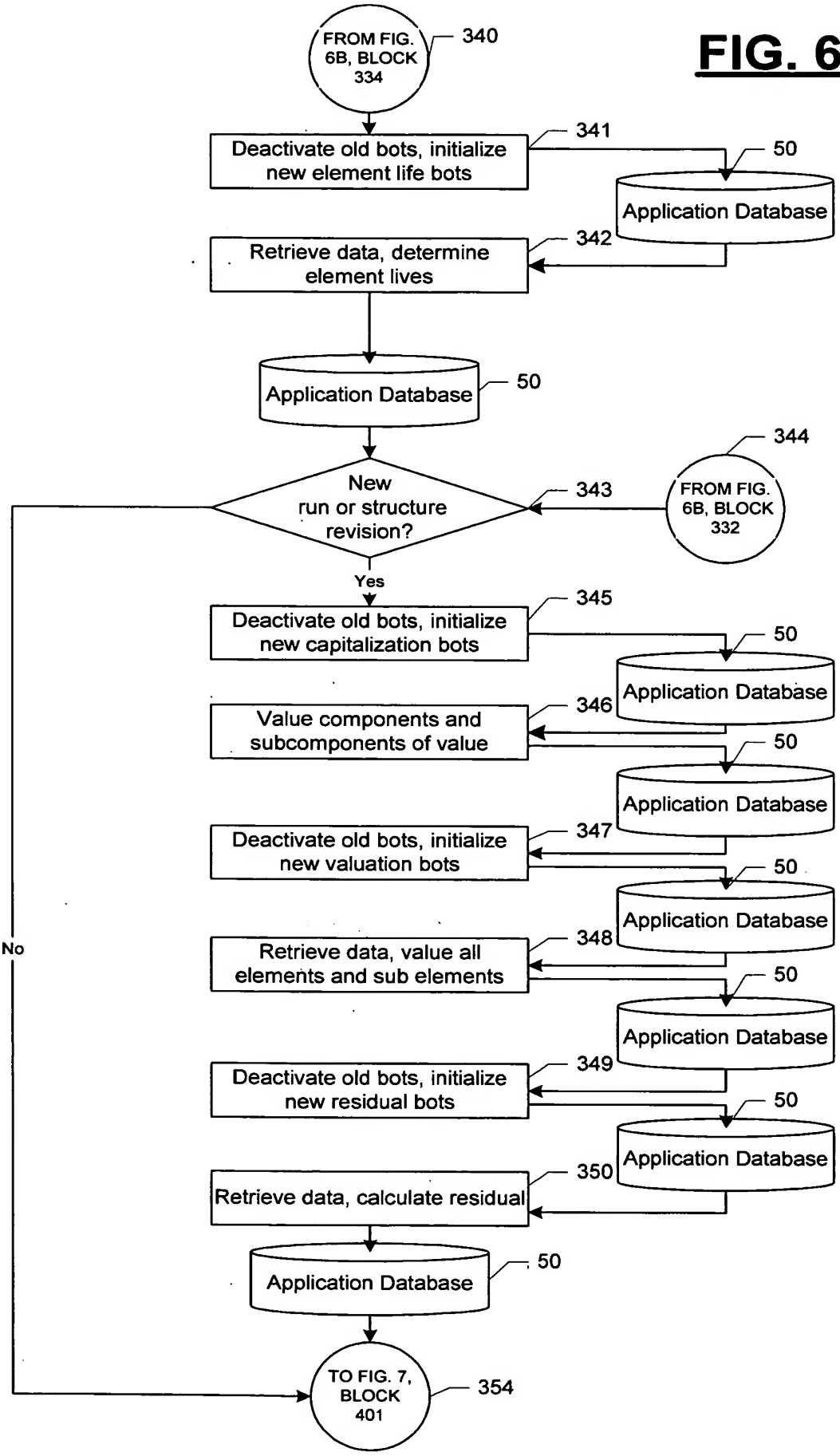

FROM FIG. 6B, BLOCK 334
340
Deactivate old bots, initialize new element life bots
341
50
Application Database
Retrieve data, determine element lives
342
Application Database
50
344
FROM FIG. 6B, BLOCK 332
New run or structure revision?
343
Yes
No
Deactivate old bots, initialize new capitalization bots
345
Value components and subcomponents of value
346
Deactivate old bots, initialize new valuation bots
347
Retrieve data, value all elements and sub elements
348
Deactivate old bots, initialize new residual bots
349
Retrieve data, calculate residual
350
TO FIG. 7, BLOCK 401
354

FIG. 7

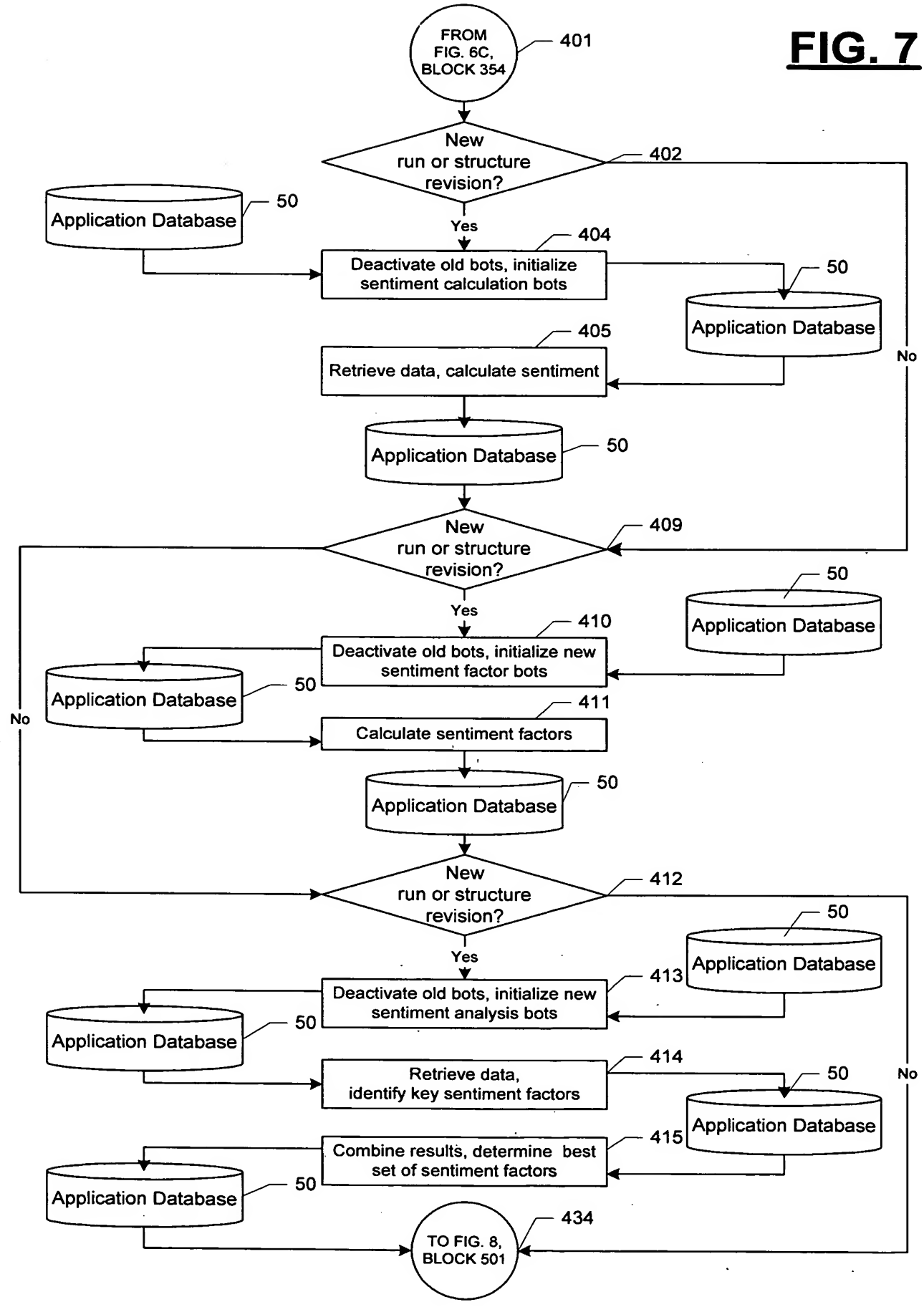

FROM FIG. 6C, BLOCK 354
401
New run or structure revision?
402
Yes
No
Application Database
50
Deactivate old bots, initialize sentiment calculation bots
404
Retrieve data, calculate sentiment
405
New run or structure revision?
409
Deactivate old bots, initialize new sentiment factor bots
410
Calculate sentiment factors
411
New run or structure revision?
412
Deactivate old bots, initialize new sentiment analysis bots
413
Retrieve data, identify key sentiment factors
414
Combine results, determine best set of sentiment factors
415
TO FIG. 8, BLOCK 501
434

FIG. 8

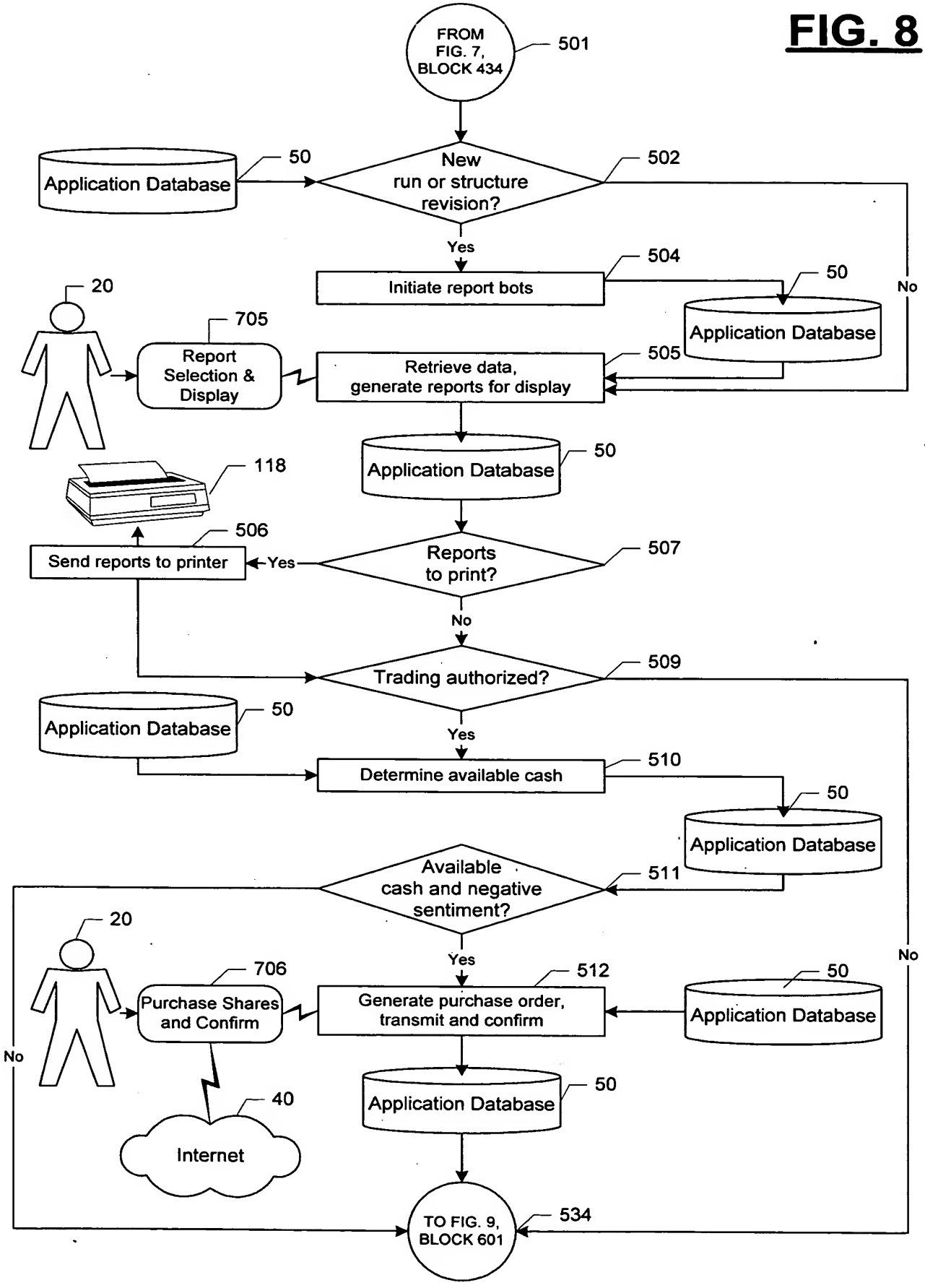

FROM FIG. 7, BLOCK 434
501
Application Database
50
New run or structure revision?
502
Yes
No
Initiate report bots
504
Application Database
50
20
705
Report Selection & Display
Retrieve data, generate reports for display
505
Application Database
50
118
Send reports to printer
506
Yes
Reports to print?
507
No
Trading authorized?
509
Application Database
50
Yes
Determine available cash
510
Application Database
50
Available cash and negative sentiment?
511
20
Yes
No
706
Purchase Shares and Confirm
Generate purchase order, transmit and confirm
512
Application Database
50
No
Application Database
50
40
Internet
TO FIG. 9, BLOCK 601
534

FIG. 9

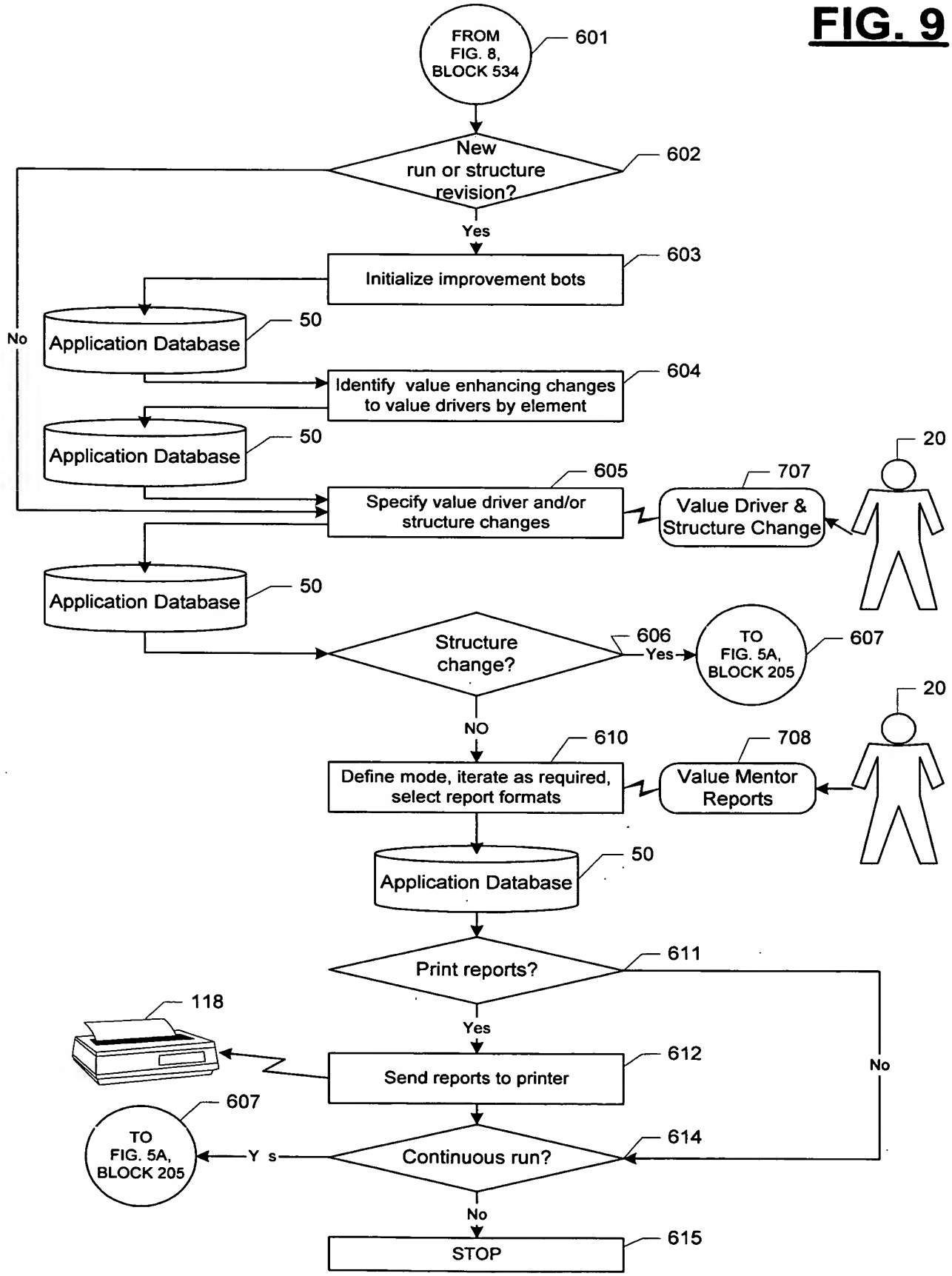
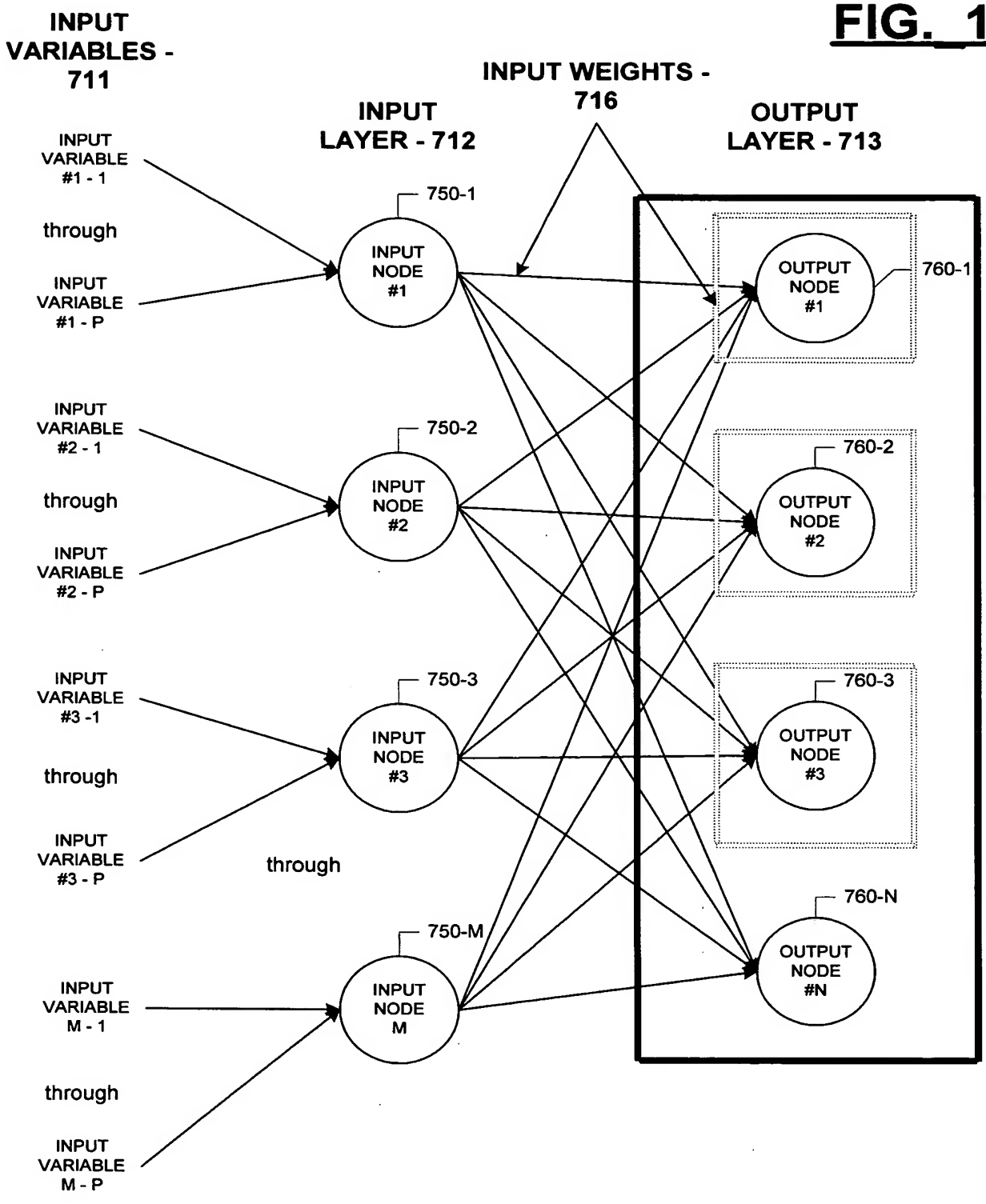

FROM FIG. 8, BLOCK 534
601
New run or structure revision?
602
Yes
No
Initialize improvement bots
603
Application Database
50
Identify value enhancing changes to value drivers by element
604
Application Database
50
Specify value driver and/or structure changes
605
Value Driver & Structure Change
707
20
Application Database
50
Structure change?
606
Yes
TO FIG. 5A, BLOCK 205
607
NO
Define mode, iterate as required, select report formats
610
Value Mentor Reports
708
20
Application Database
50
Print reports?
611
Yes
No
118
Send reports to printer
612
TO FIG. 5A, BLOCK 205
607
Y s
Continuous run?
614
No
STOP
615

FIG. 10


INPUT VARIABLES - 711
INPUT WEIGHTS - 716
INPUT LAYER - 712
OUTPUT LAYER - 713
INPUT VARIABLE #1 - 1
through
INPUT VARIABLE #1 - P
INPUT VARIABLE #2 - 1
through
INPUT VARIABLE #2 - P
INPUT VARIABLE #3 -1
through
INPUT VARIABLE #3 - P
through
INPUT VARIABLE M - 1
through
INPUT VARIABLE M - P
750-1
INPUT NODE #1
750-2
INPUT NODE #2
750-3
INPUT NODE #3
750-M
INPUT NODE M
OUTPUT NODE #1
760-1
760-2
OUTPUT NODE #2
760-3
OUTPUT NODE #3
760-N
OUTPUT NODE #N